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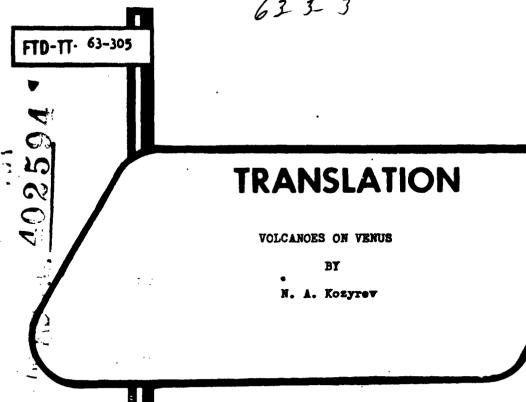
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UNEDITED ROUGH DRAFT TRANSLATION

VOLCANOES ON VENUS

BY: N. A. Kozyrev

English Pages: 3

SOURCE: Russian Newspaper, Zarya Vostoka, 18 December 1962, pp 4

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VOLCANOES ON VENUS

A New Discovery by Astronomer N. A. Kozyrev

Pulkovo, Dec. 15. (TASS). At the enlarged session of the Academic Council of the Chief Astronomical Observatory the well known Pulkovo astronomer N. A. Kozyrev gave a report on a scientific expedition into a region of active volcances, the results of which have thrown light upon volcanic activity on Venus. The scientist illustrated his report with photographs of spectra and results of measurements.

The Academic Council of the observatory remarked on the originality of the research and its great significance for astronomical science.

In a talk with a TASS correspondent, Doctor of the Physicomathematical Sciences N. A. Kozyrev stated:

"This year Pulkovo Observatory in conjunction with the Kamchatka Volcano Station conducted a scientific expedition into a region of active volcanoes of the Klyuchevskiy group at Kamchatka. We were successful in obtaining photographs of the absorption spectra of the smoke and flame at certain volcanoes. They revealed the presence of two absorption bands in the visible region of the spectrum. As early as 1953, while working at the site of Crimean Observatory, I was able

to observe bands of this same type in the spectrum of Venus. However, their nature has remained entirely unexplained up to the present.

"The existence of such bands in the spectra of volcanic fumes now provides a basis for assuming that there is strongly developed volcanic activity on Venus.

"It is curious that these bands, as shown by research which I have done, are entirely absent in the Martian atmosphere. Thus there is a basis for assuming that volcanic activity on this planet, if it does exist, is significantly weaker than on Venus and Earth.

"Rock specimens thrown off by Kamchatka volcanoes are presently being studied in the Pulkovo Observatory spectral laboratory. I hope that we will succeed in finding the substance causing these bands in the near future. According to preliminary data it is probably some chlorine compound.

"A comparison of flame spectra from the Kamchatka volcano Tolbachik with spectra of gaseous discharges on the moon observed by me in 1958 and 1961 has led to the conclusion that the lunar crust is different from the Earth's in its chemical composition. The outer layers of the moon are considerably richer than the earth's in complex hydrocarbons."

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